

## **TB2 TERMINAL COVER**

# **DOPPLER METEOROLOGICAL RADAR WSR-88D**



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**FAA APPROVAL**

 **George R Francis**  
**Jr**

Signature Valid

Digitally signed by George R Francis Jr  
DN: cn=George R Francis Jr, o=NAS Engineering Division, ou=AOS-200, c=US  
Date: 2003.07.14 09:10:42 -0700

**Date** \_\_\_\_\_

**Richard A. Thoma**  
**Program Director**  
**for Operational Support**

**1. SUBJECT**

TB2 Terminal Cover.

**2. PURPOSE**

To modify UD70/170TB2 by adding a cover to the terminal board. Currently the terminal board does not have a cover causing an electrical hazard. The addition of the new cover removes this hazard. The authorities for this modification are Radar Operations Center (ROC) Engineering Change Proposal (ECP) F0181, FAA TERMINAL BOARD COVER.

For additional information concerning this document, contact the ROC Hotline, Norman, OK; phone number: (800) 643-3363 or (405) 366-2980 or by e-mail at [NEXRAD.Hotline@noaa.gov](mailto:NEXRAD.Hotline@noaa.gov). An electronic copy of this document can be found at the following internet address: [www.roc.noaa.gov/ssb/sysdoc/techman/tmlinks.asp](http://www.roc.noaa.gov/ssb/sysdoc/techman/tmlinks.asp)

**3. SITES AFFECTED**

See [ATTACHMENT 2](#).

**4. ESTIMATED COMPLETION DATE**

This modification must be completed and reported no later than 60 days after the date the kit was shipped from the National Logistics Support Center (NLSC) and receipt of this document.

**5. EQUIPMENT AFFECTED**

Radar Product Generator (RPG) Group.

**6. SPARES AFFECTED**

Not applicable.

**7. MODIFICATION ACCOMPLISHED BY**

Site electronics technicians will perform this modification. One technician is required to perform this action.

## 8. MATERIAL REQUIRED

The following items are required to perform the procedures in [ATTACHMENT 1](#).

Nomenclature	Part Number	NSN	Qty
Marker Strip, Terminal	MSA37TB8	5940-01-258-2237	2
Screw, Machine Pan-Head	MS51957-34	5305-01-406-7438	4
Washer, Flat	NAS620C6	5310-01-300-6397	16

## 9. SOURCE OF MATERIALS

Kits are requisitioned by the ROC Retrofit Management Team and shipped at no cost to the site.

## 10. SPECIAL TOOLS AND TEST EQUIPMENT REQUIRED

Not applicable.

## 11. TIME AND PERSONNEL REQUIRED

Work Phases	Work-hours
Unpacking	.0
Disassembly	.5
Installation	.5
Assembly	.0
Operational Check	.0
Total Work-hours	1.0

**12. DOCUMENTS AFFECTED**

- a. Illustrated Parts Breakdown, dated 30 May 2002.  
NWS: EHB 6-501  
DoD: AF TO 31P1-4-108-4  
FAA: TI 6345.1 V2
- b. Maintenance Instructions, Radar Product Generator (RPG), dated 1 August 2001  
NWS: EHB 6-525  
DoD: AF TO 31P1-4-108-452-1  
FAA: TI 6345.1 V49

**13. VERIFICATION STATEMENT**

This modification was successfully performed at the Radar Operations Center.

**14. DISPOSITION OF REMOVED AND REPLACED PARTS/MATERIALS**

Not applicable.

**15. PROCEDURES**

See [ATTACHMENT 1](#).

**16. FAA DISTRIBUTION**

This directive is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: NXRAD.

**17. CHANGES TO TABLE OF CONTENTS (FAA)**

This chapter will be included in the next revision to the table of contents for FAA Order 6345.1, Electronic Equipment Modification Handbook - Next Generation Weather Radar (NEXRAD).

**18. RECOMMENDATIONS FOR CHANGES (FAA)**

Forward any recommendations for changes to this directive through normal channels to the National Airway Systems Engineering Division, AOS-200, Operational Support.

## 19. REPORTING INSTRUCTIONS

### a. FAA

Enter this directive number, date, and chapter number on the appropriate FAA Form 6032-1, Airway Facilities Modification Record.

Use the Maintenance Management System (MMS) application Log Equipment Modification (LEM) function to report the completion of this modification. Verify N is in the REP COD field to ensure the log entry will be upward reportable to the national data base for access by AOS. This directive should be entered into the LEM fields as follows:

(1) Order No.: 6345.1

(2) Chapter: 39

(3) Change: 42

### d. FAA

Complete [ATTACHMENT 3](#) and return the information to the ROC by one of the four methods below:

- (1) Mail Address: Program Branch, Retrofit Management Team  
WSR-88D Radar Operations Center  
3200 Marshall Ave., Suite 101  
Norman, Oklahoma 73072-8028
- (2) Fax Number: (405) 366-6553  
ATTN: Retrofit Management Team
- (3) E-mail Address: NEXRAD.Logistics@noaa.gov
- (4) Web Version: <http://www.roc.noaa.gov/ssb/logistics/complete/>

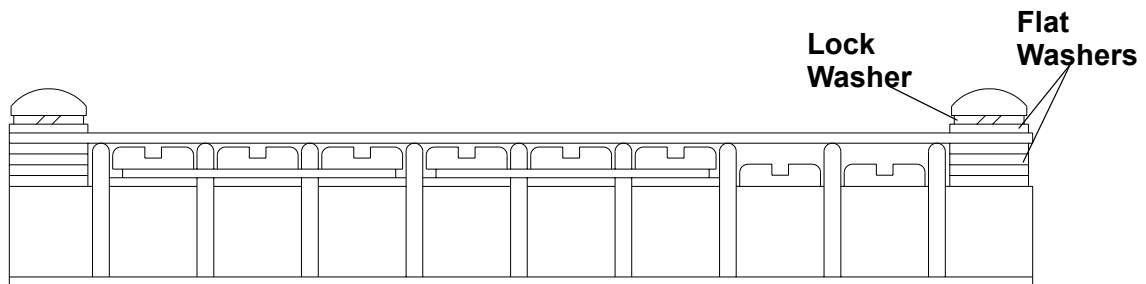
ATTACHMENT 1

TERMINAL COVER INSTALLATION PROCEDURES

**Tools required:**

Multimeter  
Phillips-tip screwdriver

1. Perform the following steps to install the new terminal cover on the non-controlling channel:
  - a. Unplug cable 70/170W150 from the power strip mounted on the rear rail of the RPG cabinet.
  - b. Using a multimeter, ensure DC power is removed from the terminal board.
  - c. Remove the two screws located at the edge of the terminal board.
  - d. Using the screws provided in the kit, slide (1) one lock washer and (1) one flat washer removed from terminal board onto the new screw.
  - e. Slide the screw with washers through the hole in the new terminal cover and then slide (4) four additional flat washers onto each screw. These (4) four flat washers work as a standoff for the new cover. As shown below.



- f. Repeat the previous steps 1d and 1e for the other side of the terminal cover.
  - g. Place the new terminal cover on top of the terminal board with the numbers facing out and the number 8 to the right.
  - h. Tighten the new screws until they are snug. Do not overtighten. Overtightening the screws could cause the terminal board cover to break.
  - i. Plug cable 70/170W150 into the power strip mounted on the rear rail of the RPG cabinet.
2. Perform the following steps to change channels at the RPG:
  - a. If the RPG HCI screen is not open, at a terminal window, enter **HCI &<Return>**. The RPG Control/Status window opens.

ATTACHMENT 1 (Continued)

TERMINAL COVER INSTALLATION PROCEDURES

- b. At the RPG HCI screen, in the RDA container, click on the **Control** button.
  - c. At the RDA Control/Status window, click on the black lock in the upper right hand corner of the window.
  - d. In the Password window, click on the **URC** radial button, and a password box will open.
  - e. Using the mouse, click in the Password text box, and enter *URC password*<Return>. The black lock should now be red.
  - f. In the RDA Control/Status window, in the RDA State portion of the window, click on the **Standby** radial button. The State should change from Operate to Standby.
  - g. At the non-controlling channel, in the RDA Control/Status window, click on the black lock in the upper right hand corner of the window.
  - h. In the Password window, click on the **URC** radial button, and a password box will open.
  - i. Using the mouse, click in the Password text box, and enter *URC password*<Return>. The black lock should now be red.
  - j. In the RDA Status/Control window, in the Redundant Control portion of the window, click on the **Controlling** radial button.
  - k. A warning\_popup window will appear, click on the **Yes** button.
  - l. In the Redundant Control position of the window, ensure the Local Channel state changes to Controlling, and the Redundant Controlling state read Non-controlling.
  - m. In the RDA Status/Control window, in the RDA State box, click on the **Operate** radial button.
  - n. In the warning\_popup window, click on the **Yes** button.
  - o. In the RDA Status/Control window, in the RDA State box, and verify the State has changed to Operate.
3. Repeat step 1 in its entirety for the second RPG while it is the non-controlling channel.



ATTACHMENT 1 (Continued)

TERMINAL COVER INSTALLATION PROCEDURES

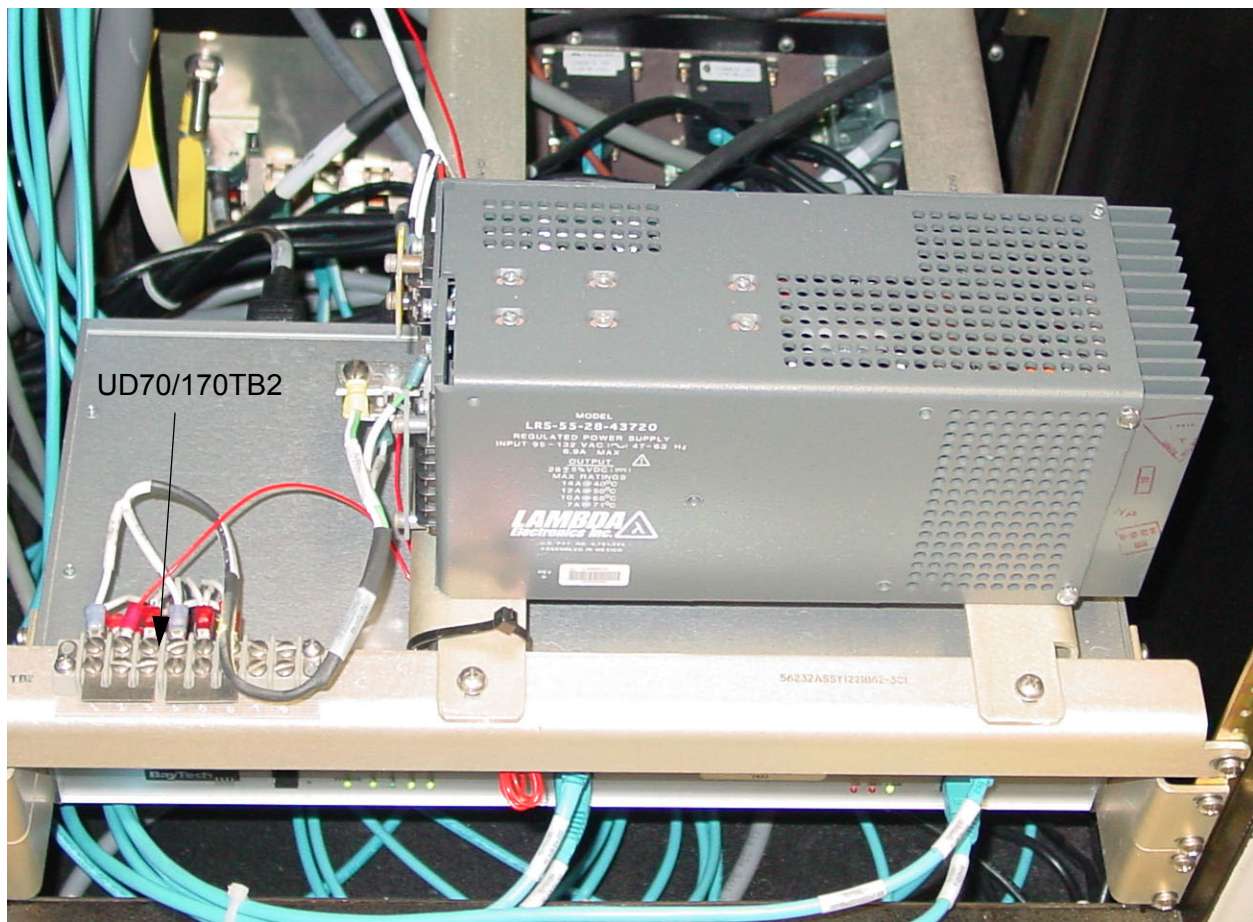


Figure 1. UD70/170TB2 Location

ATTACHMENT 1 (Continued)

TERMINAL COVER INSTALLATION PROCEDURES

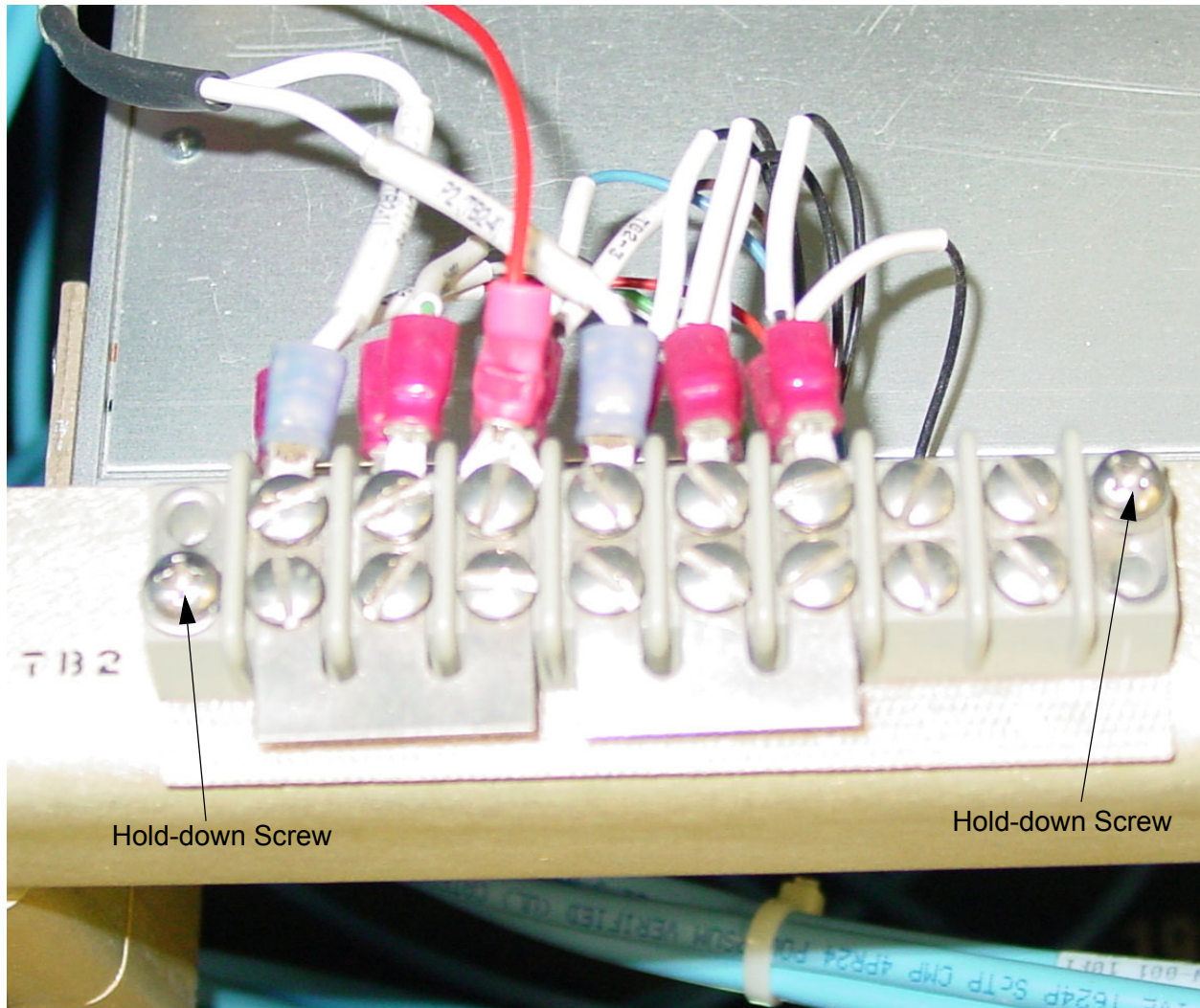


Figure 2. Hold-down Screw Locations



ATTACHMENT 1 (Continued)

TERMINAL COVER INSTALLATION PROCEDURES

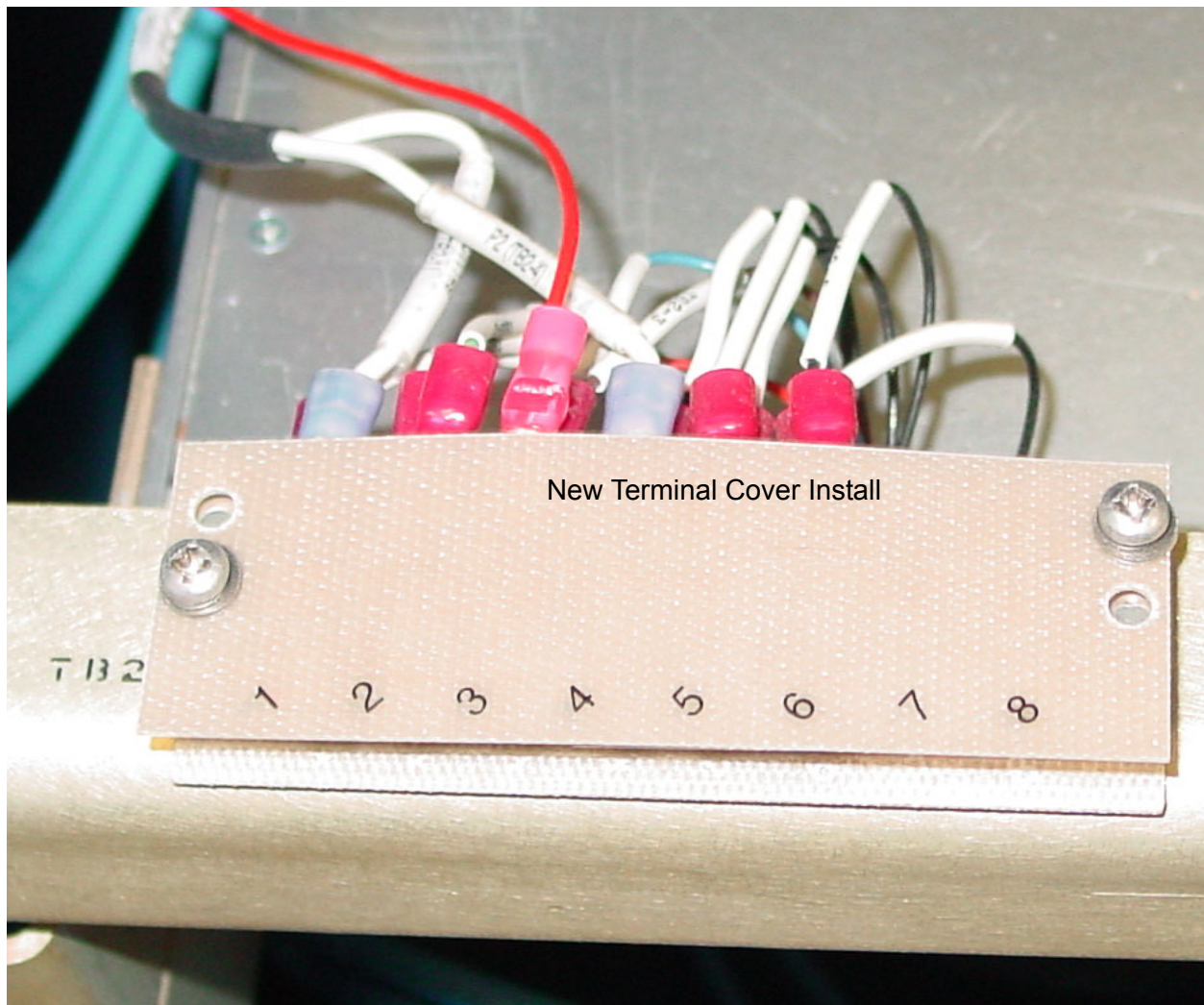


Figure 3. Terminal Cover Installed

ATTACHMENT 2

EFFECTIVITY

NWS

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
FAA				
ANCHORAGE FAA (RPG 2)	KENAI, AK	RPG	AHG	6901AJ
ANCHORAGE FAA (RPG 1)	KENAI, AK	RPG	AHG	6901AJ
BETHEL FAA (RPG 2)	BETHEL, AK	RPG	ABC	690112
BETHEL FAA (RPG 1)	BETHEL, AK	RPG	ABC	690112
FAIRBANKS FAA (RPG 2)	FAIRBANKS, AK	RPG	APD	690178
FAIRBANKS FAA (RPG 1)	FAIRBANKS, AK	RPG	APD	690178
KAMUELA/KOHALA APT(RPG 2)	KAMUELA, HI	RPG	HKM	699235
KAMUELA/KOHALA APT(RPG 1)	KAMUELA, HI	RPG	HKM	699235
KING SALMON FAA (RPG 2)	KING SALMON, AK	RPG	AKC	690137
KING SALMON FAA (RPG 1)	KING SALMON, AK	RPG	AKC	690137
MIDDLETON ISLAND (RPG 2)	MIDDLETON ISLAND, AK	RPG	AIH	690140
MIDDLETON ISLAND (RPG 1)	MIDDLETON ISLAND, AK	RPG	AIH	690140
MOLOKAI FAA (RPG 2)	MOLOKAI, HI	RPG	HMO	699213
MOLOKAI FAA (RPG 1)	MOLOKAI, HI	RPG	HMO	699213
NOME FAA (RPG 2)	NOME, AK	RPG	AEC	690147

ATTACHMENT 2 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
NOME FAA (RPG 1)	NOME, AK	RPG	AEC	690147
ROC FAA REDUNDANT (RPG 2)	NORMAN, OK	RPG	CRIO2	WG9410
ROC FAA REDUNDANT (RPG 1)	NORMAN, OK	RPG	CRIO2	WG9410
SAN JUAN FAA (RPG 2)	SAN JUAN, PR	RPG	JUA	69F362
SAN JUAN FAA (RPG 1)	SAN JUAN, PR	RPG	JUA	69F362
SITKA FAA (RPG 2)	BIORKA ISLAND, AK	RPG	ACG	690141
SITKA FAA (RPG 1)	BIORKA ISLAND, AK	RPG	ACG	690141
SOUTH KAUAI FAA (RPG 2)	SOUTH KAUAI, HI	RPG	HKI	699211
SOUTH KAUAI FAA (RPG 1)	SOUTH KAUAI, HI	RPG	HKI	699211
SOUTH SHORE FAA (RPG 2)	NAALEHU, HI	RPG	HWA	699201
SOUTH SHORE FAA (RPG 1)	NAALEHU, HI	RPG	HWA	699201

ATTACHMENT 3

TERMINAL BOARD COVER COMPLETION FORM

\*\*\*\*\* **FAA will complete and return this form** \*\*\*\*\*

Site Name: \_\_\_\_\_

Site Identifier: \_\_\_\_\_

Total Time to Complete this Modification Document: \_\_\_\_\_

Technician's Name(s): \_\_\_\_\_

Technician's Phone Number: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Problem(s) Encountered:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Upon completion of this form, return the information to the ROC using one of the four methods below:

1. Mailing Address: Program Branch, Retrofit Management Team  
WSR-88D Radar Operations Center  
3200 Marshall Ave., Suite 101  
Norman, OK 73072-8028
2. FAX Number: (405) 366-6553  
ATTN: Retrofit Management Team
3. E-mail Address: NEXRAD.Logistics@noaa.gov
4. Web Version: <http://www.roc.noaa.gov/ssb/logistics/complete/>